



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,590	11/24/2003	Satoshi Kinoshita	8022-1065	1695
466	7590	06/12/2007	EXAMINER	
YOUNG & THOMPSON			BOKHARI, SYED M	
745 SOUTH 23RD STREET				
2ND FLOOR			ART UNIT	PAPER NUMBER
ARLINGTON, VA 22202			2609	
			MAIL DATE	DELIVERY MODE
			06/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/718,590	KINOSHITA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Syed Bokhari	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 24 November 2003. DANG T. TON  
SUPERVISORY PATENT EXAMINER
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-3,9 and 14 is/are rejected.
- 7) Claim(s) 4-8 and 10-13 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>24, November 2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Specification***

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Fant et al. (US 2004/0076151 A1).

For claim 1, Fant et al. teaches a GMPLS controller used for a GMPLS network (see paragraph 0023 lines 7-10 on page 2 in Detailed Description); a resource manager responsive to a label request for managing labels, and for issuing a device setup request (see paragraph 0025 lines 1-14 on page 3 in Detailed Description) and a switch controller controlling setup of a switching device in

response to the device setup request, the switch controller being separated from the resource manager (see paragraph 0034 lines 1-11 on pages 3-4 in Detailed Description).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fant et al. (US 2004/0076151 A1) in view of Suemura (US 2003/0084367 A1).

For claim 2, Fant et al. discloses a resource manager responsive to a label request indicative of a target port selected out of the ports for managing labels, and for issuing a device setup request (see paragraph 0025 lines 5-13 on page 3 in Detailed Description); wherein the resource manager consults the port information table to determine a target switch controller associated with the target port out of the plurality of switch controllers, and provides the device setup request for the target switch controller (see paragraph 0025 lines 9-14 on page 3 in Detailed Description) and wherein the target switch controller updates a setup of the switch device associated with the target switch controller (see paragraph 0034 lines 1-9 on pages 3-4 in Detailed Description). Fant et al. discloses all the subject matter of the claimed invention with the exception of (i) a plurality of switch controllers controlling a plurality of switch devices, respectively, each of the plurality of switch devices including at least one port and (ii) a port information table describing an association of the ports to the plurality of switch controllers. Suemura from the same or similar field of endeavor teaches a plurality of switch controllers controlling a plurality of switch devices, respectively, each of the plurality of switch devices including at least one port (see paragraph 0047 lines 1-3 on page 3 in Summary of the Invention) and a port information

table describing an association of the ports to the plurality of switch controllers (see paragraph 0064 on page 5 in Summary of the Invention). It would have been obvious to one of ordinary skill in the art at the time of invention was made to use the controller along with switch table and path table of the node as taught by Suemura in the communication network of Fant et al. The switch controller along with switch table and path table for controlling of the switch devices and of the port information table describing an association of the ports to the plurality of switches controllers as taught by Suemura can be modified/implemented in the communication arrangement of Fant et al. by adding the controller along with the switch table and path table units for each switch. The switch controller along with switch table and path table units being removed from the client interface card and placed in between the GMPLS controller and the switch will increase the performance of the controller for controlling the switch in establishing the connections in accordance with switching data. The motivation of adding the switch controller, in conjunction with switch table and path table units is to provide the means to a plurality of switch controllers controlling a plurality of switch devices and also a port information table describing an association of the ports to the plurality of switch controllers with better efficiency.

For claim 14, Fant et al. discloses a method of providing a label request indicative of a target port selected out of the ports (see paragraph 0025 lines 5-13 on page 3 in Detailed Description); consulting the port information table to determine a target switch controller associated with the target port out of the

plurality of switch controllers and providing a device setup request for the target switch controller (see paragraph 0025 lines 9-14 on age 3 in Detailed Description) and updating a setup of the switch device associated with the target switch controller in response to the device setup request (see paragraph 0034 lines 1-9 on pages 3-4 in Detailed Description). Fant et al. discloses all the subject matter of the claimed invention with the exception of (i) a method for controlling switch devices provided for a GMPLS network, comprising: providing a GMPLS controller including: a plurality of switch controllers controlling a plurality of switch devices, respectively, each of the plurality of switch devices including at least one port and (ii) a port information table describing an association of the ports to the plurality of switch controllers. Suemura from the same or similar field of endeavor teaches a method for controlling switch devices provided for a GMPLS network, comprising: providing a GMPLS controller including: a plurality of switch controllers controlling a plurality of switch devices, respectively, each of the plurality of switch devices including at least one port (see paragraph 0047 lines 1-3 on page 3 in Summary of the Invention) and a port information table describing an association of the ports to the plurality of switch controllers (see paragraph 0064 lines 1-8 on page 5 in Summary of the Invention). It would have been obvious to one of ordinary skill in the art at the time of invention was made to use the method of same controllers along with switch table and path table of the node as taught by Suemura in the communication network of Fant et al. The functions of switch controllers along

with switch table and path table for controlling a plurality of switch devices and a port information table describing an association of the ports to the plurality of switch controllers as taught by Suemura can be modified/implemented in the communication arrangement of Fant et al. by adding the controller, switch table and path table units to each switch. The switch controller along with switch table and path table units being removed from the client interface card and placed in between the GMPLS controller and the switch will increase the performance of the controller for controlling the switch in establishing the connections in accordance with switching data. The motivation of adding the switch controller, in conjunction with switch table and path table units is to provide the method to a plurality of switch controllers controlling a plurality of switch devices and also a port information table describing an association of the ports to the plurality of switch controllers with better efficiency.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fant et al. (US 2004/0076151 A1) in view of Suemura (US 2003/0084367 A1) and further in view of Nomura et al. (US 7,133,402 B2).

For claim 3, Fant et al. and Suemura disclose all the subject matter of claimed invention in paragraph 7 with the exception of (i) further comprising: a label database describing whether each of the labels is in use or not (ii) wherein the label request is indicative of a target label and (iii) wherein the resource manager updates the label database to indicate that the target label is in use. Nomura et al. from the same or similar field of endeavor teaches further comprising: a label

database describing whether each of the labels is in use or not (see column 19 lines 17-25 in Third Embodiment); wherein the label request is indicative of a target label (see column 17 lines 22-27 and column 16 lines 58-64 in Second Embodiment) and wherein the resource manager updates the label database to indicate that the target label is in use (see column 18 lines 46-59 in Third Embodiment). It would have been obvious to one of ordinary skill in the art at the time of invention was made to use the same device for (i) a label database describing whether each of the labels is in use or not, (ii) the label request is indicative of a target label and (iii) the resource manager updates the label database to indicate that the target label is in use as taught by Nomura et al. in the communication network of Fant et al. The label packet relay device (consisting of label assignment table, Label assignment processing module) for label database as taught by Nomura et al. can be modified/implemented in the communication arrangement of Fant et al. by adding label packet relay device to GMPLS controller. The label packet relay device comprising of label assignment processing module and label assignment table can be used as resource manager between GMPLS controller and the switch controller for each switch. The label assignment processing module executes the process of generating label and the process of reflecting this entry in the label assignment table. The motivation of adding label packet relay device between the switch controller and the to GMPLS controller is to provide a label database describing whether each of the labels is in use or not, wherein the label request is indicative of a target

label and wherein the label assignment processing module updates the label database to indicate that the target label is in use.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fant et al. (US 2004/0076151 A1) in view of Nomura et al. (US 7,133,402 B2).

For claim 9 Fant et al. discloses a GMPLS controller system used in a GMPLS network, comprising: a plurality of GMPLS controllers each of which includes (see paragraph 0023 lines 7-10 on page 2 in Detailed Description); a switch controller controlling a switch device (see paragraph 0034 lines 1-9 on pages 3-4 in Detailed Description) and a resource manager responsive to a label request for managing labels, and for issuing a device setup request (see paragraph 0025 lines 5-13 on page 3 in Detailed Description). Fant et al. discloses all the subject matter of the claimed invention with the exception of wherein the resource managers of the plurality of GMPLS controllers use a same algorithm for issuing the device setup requests. Nomura et al. from the same or similar field of endeavor teaches wherein the resource managers of the plurality of GMPLS controllers use a same algorithm for issuing the device setup requests (see column 12 lines 48-51 in First Embodiment). It would have been obvious to one of ordinary skill in the art at the time of invention was made to use label packet relay device working with a same algorithm for issuing the device setup requests as taught by Nomura et al. in the communication network of Fant et al. The label packet relay device (consisting of label assignment table, Label assignment processing module) for label database as taught by Nomura et al. can be

modified/implemented in the communication arrangement of Fant et al. by adding label packet relay device to GMPLS controller. The label packet relay device comprising of label assignment processing module and label assignment table can be used as resource manager between GMPLS controller and the switch controller for each switch. The label assignment processing module executes the process of generating label and issuing the device setup request based on the same algorithm of all other label assignment processing modules. The motivation of adding label packet relay devices between the switch controllers and the to GMPLS controllers is to provide source of using a same algorithm for issuing the device setup requests.

***Allowable Subject Matter***

10. Claim 4-8 and 10-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 2004/0247315 A1 (Ozugur et al.), US 2004/0015583 A1 (Barrett et al.), US 2003/0193944 A1 (Sasagawa) and US 2004/0028052 A1 (Chen et al.).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Bokhari whose telephone number is (571) 270-3115. The examiner can normally be reached on Monday through Friday from 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on (571) 272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



DANG T. TON  
SUPERVISORY PATENT EXAMINER